Hyperbola WS Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Per \_\_\_\_\_ Date \_\_\_\_

1-4, Find the equation of the hyperbola with the given information.

1. Conjugate axis length of 14 2. Vertices: (7,5), (-5,5)

Foci: (-1, 9), (-1, -7) Foci: (11, 5), (-9, 5)

3. Vertices: (-1, 9) to (-1,3) 4. Center: (0,-5)

Asymptotes: Asymptotes:

Transverse axis length of 6

5-8, Determine if the conic is a parabola, circle, an ellipse or a hyperbola. Put the equation into standard form. Find the following for each conic; parabola: vertex, focus, directrix, and LR points, circle: center, radius and ellipse: center, foci, vertices, and co-vertices, hyperbola: center, foci, vertices, and asymptotes .

5. 14y+y2-4x+97 =0 6. 18x – 3x2 -19 = -8y2 + 32y

7. x2 - 4x = -y2 + 12y - 31 8. 14 + 4y + 2x2 = -12x – y2